--In addition to the above example, any other suitable material may be used to construct cable conduits 8610, 8620, and 8630, and cable conduit may be positioned at any appropriate location on harness 8000.--

A9

In the Claims

Please add the following new claims:

-- 3. An apparatus for use by a technician to facilitate at least one of testing and diagnosing the condition of a device, comprising:

a data collection instrument for obtaining property data describing at least one property of said device;

a first camera adapted to obtain first imagery relevant to said device;

a second camera adapted to obtain second imagery relevant to said device;

a microphone;

A10

a speaker;

a first display unit;

a computer adapted to store and to process data and adapted to be worn on a user's body;

a first communications channel connecting said computer and said data collection instrument;

a second communications channel connecting said computer and said first camera;

a third communications channel connecting said computer, said microphone and said speaker;

a fourth communications channel connecting said computer and said first display unit;

a fifth communications channel connecting said computer and a remote data processor, said remote data processor adapted to receive data from and transmit data to said computer;

a sixth communications channel connecting said computer and said second camera; and

a battery adapted to provide power to at least one of said first display unit and said computer.

A10

4. The apparatus of claim 3 further comprising a harness adapted to selectively carry one or more of said first camera, said computer, said first display unit, said battery, and at least a portion of said data collection instrument.

5. The apparatus of claim 3 wherein said data collection instrument comprises an electrical probe.

6. The apparatus of claim 5 wherein said electrical probe comprises positive and negative test leads.

7. The apparatus of claim 3 wherein said data collection instrument comprises a data collection unit adapted to collect and transmit data and a receiver adapted to receive data through wireless communication from said data collection unit.

8. The apparatus of claim 3 wherein said first imagery is real time video.

9. The apparatus of claim 3 wherein said first imagery is a snapshot.

10. The apparatus of claim 3 wherein said second imagery is video.

A16 11. The apparatus of claim 3 wherein said second imagery is real time video.

12. The apparatus of claim 3 wherein said second imagery is a snapshot.

13. The apparatus of claim 3 wherein said second camera has a narrower field of view than said first camera.

14. The apparatus of claim 3 wherein said microphone and said speaker comprise a headset.

15. The apparatus of claim 3 wherein said first display unit is adapted to receive data input from a user and transmit said data to said computer.

16. The apparatus of claim 3 wherein said computer includes a graphical user interface.

17. The apparatus of claim 16 wherein said graphical user interface includes a virtual control device.

18. The apparatus of claim 16 wherein said graphical user interface includes virtual knobs and buttons.

A10

19. The apparatus of claim 3 wherein said computer is adapted to generate reports.

20. The apparatus of claim 19 wherein said reports include one or more of a time stamp, user identification and user comments.

21. The apparatus of claim 3 wherein said fifth communications channel is wireless.

22. The apparatus of claim 3 wherein said fifth communications channel is adapted for audio communication.

23. The apparatus of claim 3 wherein said fifth communications channel is adapted for video communication.

24. The apparatus of claim 23 wherein said video communication comprises real time video.

25. The apparatus of claim 23 wherein said video communication comprises a snapshot.

26. The apparatus of claim 3 wherein said fifth communications channel is adapted for data communication.

A10

27. The apparatus of claim 3 wherein said fifth communications channel allows real-time collaboration between said technician and another person.

28. The apparatus of claim 3 wherein said computer is mounted in a shock resistant housing.

29. The apparatus of claim 3 wherein said computer is mounted in a housing machined from a block of metal.

30. The apparatus of claim 29 wherein said housing includes a cooling tunnel and a cooling fan.

31. The apparatus of claim 4 wherein said harness includes at least one of a back support belt, an accessory pouch, and a cable conduit.

32. The apparatus of claim 3 further comprising a third camera adapted to obtain infrared imagery of said device and a corresponding communications channel connecting said computer and said third camera.

33. The apparatus of claim 3 further comprising a second display unit and a corresponding communications channel connecting said computer and said second display unit.

A10

34. The apparatus of claim 33 wherein said second display unit is incorporated into a headset.

35. The apparatus of claim 33 wherein said second display unit is incorporated into protective eyewear.

36. The apparatus of claim 3 wherein said computer is adapted to run software enabling said computer to emulate at least one of a digital multi meter, oscilloscope, dynamic signal analyzer, arbitrary waveform generator, function generator, counter, timer, logic analyzer, waveform editor, device calibrator, and data logger.

37. The apparatus of claim 3 wherein said computer and said first display unit are adapted to display technical information related to said device.

38. The apparatus of claim 37 wherein said technical information prompts said user for input and said computer responds to said input.

39. An apparatus for use by a technician to facilitate at least one of testing and diagnosing the condition of a device, comprising:

a data collection instrument for obtaining property data describing at least one property of said device;

A10

a first camera having a first field of view adapted to obtain first imagery relevant to said device;

a second camera having a second field of view adapted to obtain second imagery relevant to said device, wherein said first field of view is wider than said second field of view;

a headset comprising a microphone and a speaker, wherein said headset is adapted to enable audio communication between said technician and another person at another location;

a display unit;

a computer adapted to store and to process data, said computer having a graphical user interface, said graphical user interface including a virtual control device, and said computer being adapted to be worn on a user's body and to prepare reports;

a first communications channel connecting said computer and said data collection instrument;

a second communications channel connecting said computer and said first camera;

a third communications channel connecting said computer and said headset;

a fourth communications channel connecting said computer and said display unit;

a fifth communications channel connecting said computer and a remote location, said fifth communications channel being adapted for at least one of audio and video communication, said fifth communications channel being further adapted for collaboration between said technician and another person;

a sixth communications channel connecting said computer and said second camera;

a battery adapted to provide power to at least one of said display unit and said computer;

a harness adapted to carry one or more of said first camera, said second camera, said computer, said first display, said battery, and at least a portion of said data collection instrument.

40. The apparatus of claim 39 wherein said collaboration is in real time.

41. An apparatus for use by a technician to facilitate at least one of testing and diagnosing the condition of a device, comprising:

a data collection instrument for obtaining property data describing at least one property of said device;

a first infrared camera adapted to obtain infrared imagery relevant to said device;

a microphone;

a speaker;

a first display unit;

a computer adapted to store and to process data and adapted to be worn on a user's body;

a first communications channel connecting said computer and said data collection instrument;

A10

a second communications channel connecting said computer and said first camera;

a third communications channel connecting said computer, said microphone and said speaker;

a fourth communications channel connecting said computer and said first display unit;

a fifth communications channel connecting said computer and a remote data processor, said remote data processor adapted to receive data from and transmit data to said computer; and

a battery adapted to provide power to at least one of said first display unit and said computer.

42. An apparatus for use by a technician to facilitate at least one of testing and diagnosing the condition of a device, comprising:

a data collection instrument for obtaining property data describing at least one property of said device;

a first camera adapted to obtain first imagery relevant to said device;

a microphone;

a speaker;

a display unit;

a computer adapted to store and to process data and adapted to be worn on a user's body;

wherein said display unit is adapted to receive data input from said user and transmit said data input to said computer;

a first communications channel connecting said computer and said data collection instrument;

a second communications channel connecting said computer and said first camera;

a third communications channel connecting said computer, said microphone and said speaker;

a fourth communications channel connecting said computer and said display unit;

a fifth communications channel connecting said computer and a remote data processor, said remote data processor adapted to receive data from and transmit data to said computer; and

a battery adapted to provide power to at least one of said display unit and said computer.

43. A method for at least one of testing and diagnosing the condition of a device using a wearable computer, comprising the steps of:

locating said wearable computer proximate to said device;

obtaining property data relating to at least one property of said device;

storing said property data in said wearable computer;

obtaining first imagery relevant to said device;

storing said first imagery in said wearable computer; and

displaying on a first display unit at least one of said property data and said first imagery.

A10

44. The method of claim 43 wherein said step of obtaining property data is carried out using an electrical probe.

45. The method of claim 43 wherein said step of obtaining property data is carried out using a data collection unit and receiver for receiving data from said data collection unit through wireless communication.

46. The method of claim 43 further comprising the step of annotating said first imagery on said first display unit.

47. The method of claim 43 further comprising the step of obtaining second imagery relevant to said device.

48. The method of claim 47 wherein said second imagery has a narrower field of view than said first imagery.

49. The method of claim 47 further comprising the step of storing said second imagery in said wearable computer.

X10

50. The method of claim 47 further comprising the step of displaying said second imagery on said first display unit.

51. The method of claim 50 further comprising the step of annotating said second imagery on said first display unit.

52. The method of claim 47 further comprising the step of transmitting at least one of said property data and said second imagery to another computer at another location.

53. The method of claim 52 further comprising displaying at least one of said property data and said second imagery at said other location to another individual.

54. The method of claim 43 further comprising the step of transmitting at least one of said property data and said first imagery to another computer at another location.

55. The method of claim 54 further comprising the step of displaying at least one of said property data and said first imagery at said other location to another individual.

56. The method of claim 43 further comprising the step of collaborating with another individual at another location.

57. The method of claim 56 wherein said step of collaborating is carried out in real time.

58. The method of claim 57 wherein said step of collaborating with another individual at another location is accomplished through said computer.

59. The method of claim 58 wherein the results of said collaboration can be stored for future reference.

60. The method of claim 43 further comprising the step of receiving from another location information concerning said device.

61. The method of claim 60 wherein said information includes technical information concerning said device.

62. The method of claim 61 wherein said technical information prompts a user for input and said wearable computer responds to said input

63. The method of claim 60 wherein said information is displayed on said first display unit.

64. The method of claim 43 wherein said first display unit is interactive such that a user can annotate data displayed thereon.

65. The method of claim 43 further comprising the step of displaying data relevant to said device on a second display unit.

66. The method of claim 43 further comprising the step of displaying data relevant to said device on a second display unit, wherein said second display unit is configured so that a user can view said device and said data on said second display unit simultaneously.

67. The method of claim 43 wherein said first imagery is infrared imagery. --